In the Claims:

Please amend the claims by replacing all prior versions of the claims pursuant to 37 C.F.R. §1.121 as modified by 68 Fed. Reg. 38611 (June 30, 2003) as follows:

1-3. (Currently Canceled)

4. (Original) A method of determining whether a compound enhances formation of a complex between a p66 subunit polypeptide of HIV-1 reverse transcriptase and a p51 subunit polypeptide of HIV-1 reverse transcriptase which comprises:

a) contacting a yeast cell with the compound, which cell comprises (i) a first plasmid which expresses a fusion protein comprising ~~a~~ the p66 subunit polypeptide of HIV-1 reverse transcriptase, (ii) a second plasmid which expresses a fusion protein comprising ~~a~~ the p51 subunit polypeptide of HIV-1 reverse transcriptase, and (iii) a reporter gene which is activated in the presence of a complex between the p66 subunit polypeptide and the p51 subunit polypeptide, and determining ~~the~~ a level of activity of the reporter gene in the cell in the presence of the compound; and

b) comparing the level of activity of the reporter gene determined in step (a) with a level of activity of the reporter gene determined in the absence of the compound, wherein an increased level of activity of the reporter gene determined in step (a) indicates that the compound ~~is an activator of the~~ enhances formation of ~~the~~ a complex between the p51 subunit polypeptide of HIV-1 reverse transcriptase and the p66 subunit polypeptide of

HIV-1 reverse transcriptase.

5-8. (Currently Canceled)

9-41. (Previously Canceled)

42. (Currently Amended) A method of making a pharmaceutical composition which comprises:

a) determining whether a compound not previously known ~~inhibits HIV-1 reverse transcriptase~~ enhances formation of a complex between a p66 subunit polypeptide of HIV-1 reverse transcriptase and a p51 subunit polypeptide of HIV-1 reverse transcriptase by the method of ~~any one of claims 1-8~~ claim 4;

b) recovering the compound if it is determined to ~~inhibit HIV-1 reverse transcriptase~~ enhance formation; and

c) admixing the compound with a pharmaceutically acceptable carrier.

43-47. (Currently Canceled)

48-59. (Previously Canceled)

60-64. (Currently Canceled)

65. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a peptide having a DNA binding domain, and (b) the fusion protein expressed by the second plasmid comprises a peptide having a transcription activation domain.

66. (New) The method of claim 65, wherein the DNA binding domain is a LexA DNA binding domain.

67. (New) The method of claim 66, wherein the peptide having a DNA binding domain comprises LexA amino acid residues 1-87.

68. (New) The method of claim 66, wherein the peptide having a DNA binding domain comprises LexA amino acid residues 1-202.

69. (New) The method of claim 65, wherein the DNA binding domain is a GAL4 DNA binding domain.

70. (New) The method of claim 65, wherein the transcription activation domain is a GAL4 transcription activation domain.

71. (New) The method of claim 70, wherein the peptide having the transcription activation domain comprises GAL4 amino acid residues 768-881.

72. (New) The method of claim 65, wherein the transcription activation domain is a VP16 transcription activation domain.

73. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a peptide having a transcription activation domain, and (b) the fusion protein expressed by the second plasmid comprises a peptide having a DNA binding domain.

74. (New) The method of claim 73, wherein the DNA binding domain is a LexA DNA binding domain.

75. (New) The method of claim 74, wherein the peptide having a DNA binding domain comprises LexA amino acid residues 1-87.

76. (New) The method of claim 74, wherein the peptide having a DNA binding domain comprises LexA amino acid residues 1-202.

77. (New) The method of claim 73, wherein the DNA binding domain is a GAL4 DNA binding domain.

78. (New) The method of claim 73, wherein the transcription activation domain is a GAL4 transcription activation domain.

79. (New) The method of claim 78, wherein the transcription activation domain comprises GAL4 amino acid residues 768-881.

80. (New) The method of claim 73, wherein the transcription activation domain is a VP16 transcription activation domain.

81. (New) The method of claim 4, wherein the fusion protein expressed by the first plasmid, the second plasmid or both plasmids comprises a peptide comprising consecutive alanine residues.

82. (New) The method of claim 81, wherein the peptide comprising consecutive alanine residues comprises at least 6 alanine residues.

83. (New) The method of claim 4, wherein the fusion protein comprises an influenza hemagglutinin (HA) epitope tag.

84. (New) The method of claim 4, wherein the reporter gene is a LacZ reporter gene.

85. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a peptide comprising a LexA protein DNA binding domain, wherein the p66 subunit polypeptide is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising a LexA protein DNA binding domain; and (b) the fusion protein expressed by the second plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, and an influenza hemagglutinin (HA) epitope tag, which Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the influenza hemagglutinin (HA) epitope tag, which influenza hemagglutinin (HA) epitope tag is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

86. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a peptide comprising a LexA protein DNA binding domain, wherein the p66 subunit polypeptide is bound at it's C-terminal amino acid to the N-terminal amino acid of the peptide comprising a LexA protein DNA binding domain; and (b) the fusion protein expressed by the second plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, which Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

87. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a LexA peptide

corresponding to amino acid residues 1-87, wherein the LexA peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the of the p66 subunit polypeptide; and (b) the fusion protein expressed by the second plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, and an influenza hemagglutinin (HA) epitope tag, which Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the influenza hemagglutinin (HA) epitope tag, which influenza hemagglutinin (HA) epitope tag is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

88. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a LexA peptide corresponding to amino acid residues 1-87, wherein the LexA peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the of the p66 subunit polypeptide; and (b) the fusion protein expressed by the second plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, which Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

89. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a LexA peptide corresponding to amino acid residues 1-202, and a peptide comprising six consecutive alanine residues, wherein the LexA peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising six consecutive alanine residues, wherein the peptide comprising six consecutive alanine residues is bound at its C-terminal amino acid to the N-terminal

amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by the second plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, which Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

90. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a LexA peptide corresponding to amino acid residues 1-202, and a peptide comprising six consecutive alanine residues, wherein the LexA peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising six consecutive alanine residues, wherein the peptide comprising six consecutive alanine residues is bound at its C-terminal amino acid to the N-terminal amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by the second plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, and an influenza hemagglutinin (HA) epitope tag, which Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the influenza hemagglutinin (HA) epitope tag, which influenza hemagglutinin (HA) epitope tag is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

91. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, an influenza hemagglutinin (HA) epitope tag, and a peptide comprising six consecutive alanine residues, wherein the Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the

influenza hemagglutinin (HA) epitope tag, wherein the influenza hemagglutinin (HA) epitope tag is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising six consecutive alanine residues, wherein the peptide comprising six consecutive alanine residues is bound at its C-terminal amino acid to the N-terminal amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by second plasmid comprises a peptide comprising a LexA protein DNA binding domain, wherein the p51 subunit polypeptide is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising a LexA protein DNA binding domain.

92. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, an influenza hemagglutinin (HA) epitope tag, and a peptide comprising six consecutive alanine residues, wherein the Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the influenza hemagglutinin (HA) epitope tag, wherein the influenza hemagglutinin (HA) epitope tag is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising six consecutive alanine residues, wherein the peptide comprising six consecutive alanine residues is bound at its C-terminal amino acid to the N-terminal amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by second plasmid comprises a peptide comprising a LexA protein DNA binding domain, wherein peptide comprising a LexA protein DNA binding domain is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

93. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, an influenza hemagglutinin (HA) epitope tag, and a peptide comprising six consecutive alanine residues, wherein the Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the influenza hemagglutinin (HA) epitope tag, wherein the influenza hemagglutinin (HA) epitope tag is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising six consecutive alanine residues, wherein the peptide comprising six consecutive alanine residues is bound at its C-terminal amino acid to the N-terminal amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by second plasmid comprises a peptide comprising a Gal4 protein DNA binding domain, which peptide comprising a Gal4 protein DNA binding domain is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

94. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, wherein the Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by second plasmid comprises a peptide comprising a LexA protein DNA binding domain, wherein the p51 subunit polypeptide is bound at its C-terminal amino acid to the N-terminal amino acid of the peptide comprising a LexA protein DNA binding domain.

95. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, wherein the Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by second plasmid comprises a peptide comprising a LexA protein DNA binding domain, which peptide comprising a LexA protein DNA binding domain is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

96. (New) The method of claim 4, wherein (a) the fusion protein expressed by the first plasmid comprises a Gal4 peptide corresponding to amino acids 768-881 of Gal4, wherein the Gal4 peptide is bound at its C-terminal amino acid to the N-terminal amino acid of the p66 subunit polypeptide; and (b) the fusion protein expressed by second plasmid comprises a peptide comprising a Gal4 protein DNA binding domain, which peptide comprising a Gal4 protein DNA binding domain is bound at its C-terminal amino acid to the N-terminal amino acid of the p51 subunit polypeptide.

97. (New) A method of enhancing formation of a complex between a p51 subunit polypeptide of HIV-1 reverse transcriptase and a p66 subunit polypeptide of HIV-1 reverse transcriptase, with a compound not previously known which comprises:

a) contacting a yeast cell with the compound, which cell comprises (i) a first plasmid which expresses a fusion protein comprising the p66 subunit polypeptide of HIV-1 reverse transcriptase, (ii) a second plasmid which

expresses a fusion protein comprising the p51 subunit polypeptide of HIV-1 reverse transcriptase, and (iii) a reporter gene which is activated in the presence of a complex between the p66 subunit polypeptide and the p51 subunit polypeptide, and determining a level of activity of the reporter gene in the cell in the presence of the compound;

b) comparing the level of activity of the reporter gene determined in step (a) with a level of activity of the reporter gene determined in the absence of the compound, wherein an increased level of activity of the reporter gene determined in step (a) indicates that the compound enhances formation of a complex between the p51 subunit polypeptide of HIV-1 reverse transcriptase and the p66 subunit polypeptide of HIV-1 reverse transcriptase;

c) contacting either (1) the p51 subunit polypeptide, (2) the p66 subunit polypeptide, or (3) both the p51 subunit polypeptide and the p66 subunit polypeptide, with an effective amount of the compound determined to enhance formation of the complex in step (c), so to thereby enhance formation of a complex between the p51 subunit polypeptide of HIV-1 reverse transcriptase and a p66 subunit polypeptide of HIV-1 reverse transcriptase.

98. (New) The method of claim 97, wherein the p51 subunit polypeptide of HIV-1 reverse transcriptase and the p66 subunit polypeptide of HIV-1 reverse transcriptase are present in a subject and the contacting is effected by administering the compound to the subject.

99. (New) The method of claim 98, wherein the compound is administered orally, intravenously, subcutaneously, intramuscularly, topically or by liposome-mediated delivery.

100. (New) The method of claim 98, wherein the subject is a human being, a primate, an equine, an avian, a bovine, a porcine, a canine, a feline or a mouse.

101. (New) The method of claim 98, wherein the effective amount of the compound is between about 1mg and about 50mg per kg body weight of the subject.

102. (New) The method of claim 101, wherein the effective amount of the compound is between about 2mg and about 40mg per kg body weight of the subject.

103. (New) The method of claim 102, wherein the effective amount of the compound is between about 3mg and about 30mg per kg body weight of the subject.

104. (New) The method of claim 103, wherein the effective amount of the compound is between about 4mg and about 20mg per kg body weight of the subject.

105. (New) The method of claim 104, wherein the effective amount of the compound is between about 5mg and about 10mg per kg body weight of the subject.

106. (New) The method of claim 105, wherein the compound is administered at least once per day.

107. (New) The method of claim 98, wherein the compound is administered daily.

108. (New) The method of claim 98, wherein the compound is administered every other day.

109. (New) The method of claim 98, wherein the compound is administered every 6 to 8 days.

110. (New) The method of claim 98, wherein the compound is administered weekly.

111. (New) A compound not previously known determined to be capable of enhancing formation of a complex between a p51 subunit polypeptide of HIV-1 reverse transcriptase and a p66 subunit polypeptide of HIV-1 reverse transcriptase by the method of claim 4.

112. (New) A composition which comprises the compound of claim 111 and a carrier.